

Appl. No.: 10/606,317  
TC/A.U.: 3711 Docket No.: C02-29  
Reply to Office Action of April 6, 2005

### **REMARKS**

Claims 1-7, 9, and new claim 23, appear in this application for the Examiner's review and consideration.

Claim 1 has been amended to recite that the front face is thin. Support for the amended element is found in the Specification, on page 4, lines 11-14.

No new matter was introduced due to these amendments and addition.

### **Rejection Under 35 U.S.C. § 112, Second Paragraph**

Claim 9 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the use of "may". "May" has been deleted and replaced by "is able to".

The rejection under 35 U.S.C. § 112, second paragraph, is therefore believed to have been overcome. Applicants respectfully request reconsideration and withdrawal thereof.

### **Rejection Over McKay, Jr. et al. In View of Nagai et al.**

Claims 1-5, 7, and 9 were rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 5,904,628 issued to McKay, Jr. et al. in view of U.S. Publication No. 2004/0023730 to Nagai et al. McKay is generally directed to a "hollow club head in the shape of a driver or other wood club" (col. 4, lines 1-2), and an inflated bladder made from thin sheet or film material (Col. 5, lines 31-37, and Col. 6, lines 40-44). McKay never refers to the possibility of an inflatable bladder used in "irons" except when discussing shafts (Col. 9, lines 18-21). McKay does not discuss utilizing any form of bladder molding in an iron-type club.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Appl. No.: 10/606,317  
TC/A.U.: 3711 Docket No.: C02-29  
Reply to Office Action of April 6, 2005

The Applicants must strongly disagree with the Examiner's correlation of the bladder molding of McKay to what is described in the present invention. The Applicants have used a well known means (bladder molding) to place a composite core within the iron-hybrid type club head. The composite core, disclosed by the applicants, is not a thin material or film, as stated in McKay, but it is of sufficient substance and strength to not only provide support for a very thin front face, but to also serve as the visible back surface of the club head. There does not appear to be any prior art that anticipates this concept. Of the hundreds of hybrid type club heads that have been designed over the past fifty years, not one has utilized this technique. In our previous response to the Office Action of December 16, 2004, we copied page 142 from the February issue of "Golf Digest" which set apart this iron-like hybrid from all others on the market. The citation of 35cc to 50cc for an internal volume appears in independent claim 1 because it is a very innovative concept for an iron-type hybrid club, in that it provides not only a composite core which serves as a support to a very thin front face, but a core that also serves as the visible back portion of an iron sized club.

In present day wood type club head design, the size of drivers may approach 460cc in size, yet they must somehow try to maintain a weight of about 200 grams. This demands that the shell, and in some cases the front face, be relatively thin. Thin front faces must be therein supported with a core or composite of some kind. But that has not been the case with iron-type hybrids. Until now, while some manufacturers have made hollow hybrids, none has sought to make the shell extremely thin (therein requiring a composite core for support to the face region) and none has utilized the composite core to also serve as the back portion of the club head. If the Examiner will please take note of Patent Publication 2005/0009626 to Imamoto, it is apparent that the industry has seen the value of the Applicants inventive concepts.

Nagai does not cure the deficiency of McKay. Nagai discloses only the old style hollow hybrid iron. Even if McKay utilized his bladder molding of a thin film in the Nagai club head, it would not recreate any of the design concepts of the present invention. Nagai would not support a thin front face nor a bladder molded core serving as a back surface. Certainly, there is no motivation to modify the references or any reasonable expectation of success in their combination, because McKay was not seeking to provide a composite core that would provide strength to the front face and to provide an entire

Appl. No.: 10/606,317  
TC/A.U.: 3711 Docket No.: C02-29  
Reply to Office Action of April 6, 2005

back surface. Additionally, neither reference, alone or in combination, discloses these design parameters, as now recited in Claim 1 of the present invention.

The rejection under 35 U.S.C. § 103(a) is believed to have been overcome for at least the above reasons. Applicants respectfully request reconsideration and withdrawal thereof.

#### **Rejection Over McKay In View of Kobayashi**

Claims 1-3, and 7, were rejected under 35 U.S.C. § 103(a) as being obvious over McKay, Jr. et al. in view of U.S. Patent No. 5,421,577 to Kobayashi. McKay is discussed above, and Kobayashi is generally directed to a hollow hybrid golf club that lowers the center of gravity of the club head by the addition of weights in the sole of the club. This reinforces the Applicants invention. Again, a hollow hybrid golf club is presented that does not consider the use of a lightweight composite core to provide support for a thin front face or to serve as a back surface to save valuable weight in this area.

Kobayashi fails to cure the deficiencies of McKay. There is no motivation to modify the references or any reasonable expectation of success in their combination.

The rejection under 35 U.S.C. § 103(a) is believed to have been overcome for at least the above reasons. Applicants respectfully request reconsideration and withdrawal thereof.

#### **Rejection Over McKay In View of Nagai et al. and further in view of Iwata et al.**

Claims 6 were rejected under 35 U.S.C. § 103(a) as being obvious over McKay in view of Nagai and further in view of U.S. Publication 2001/0055996 to Iwata et al. Iwata et al. is generally directed to a citation of Coefficient of Restitution.

The Applicants realize that claim 6 is only patentable based on the addition of further limitations on an independent claim and its patentability is based on the totality of its dependence on claim 1 being allowed.

Appl. No.: 10/606,317  
TC/A.U.: 3711 Docket No.: C02-29  
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The rejection under 35 U.S.C. § 103(a) is believed to have been overcome for at least the above reasons. Applicants respectfully request reconsideration and withdrawal thereof.

**Rejection Over McKay In View of Nagai and further in view of Galloway et al.**

Claims 6 was rejected under 35 U.S.C. § 103(a) as being obvious over McKay in view of Nagai and further in view of U.S. Patent 6,354,962 to Galloway *et al.* Galloway is generally directed to the coefficient of restitution as a function of a variable front face thickness. As in the above response, the Applicants base the patentability of claim 6 on the totality of the claim as it further defines an allowed claim.

The rejection under 35 U.S.C. § 103(a) is believed to have been overcome for at least the above reasons. Applicants respectfully request reconsideration and withdrawal thereof.

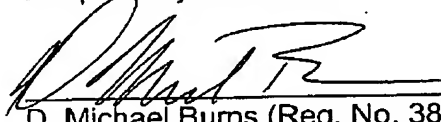
**Conclusion**

Based on the remarks set forth above, Applicants believe that all of the rejections have been overcome and the claims of the subject application are in condition for allowance. Should the Examiner have any further concerns or believe that a discussion with the Applicants' agent would further the prosecution of this application, the Examiner is encouraged to call the agent at the number below.

No fee is believed to be due for this submission. However, should any required fees be due, please charge them to Acushnet Company Deposit Account No. 502309.

Jun. 24, 2005  
Date

Respectfully submitted,

  
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